

# TOOLBOX TALKS

## Agriculture Industry: Grain Bin Entrapment

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### TOPIC: Grain Bin Entrapment

Grain bins can be dangerous places to work, and over the past several years the number of reported cases of grain entrapment has increased.

#### Contributing Factors

- Spoiled, moldy, or frozen grain
- High capacity grain handling systems
- Not following proper safety procedures

#### Types of Entrapment

- Flowing grain creates a funnel and the grain in the center flows faster than the grain on the edges. The auger size determines how fast the grain will flow, and the unloading rates of modern augers can result in a person being engulfed in seconds.
- Grain bridges form when out-of-condition grain creates a crust across the top of the grain. Cavities can form underneath the grain bridge, as grain is unloaded. Breaking through the grain bridge can result in falls and engulfment in the flowing grain below.
- Vertical grain walls form when out-of-condition grain cakes in columns against the walls of the bin. When these columns break loose, they can create large avalanches of grain.

#### Preventative Measures

- Do not enter bins unless absolutely necessary, and place warning signs around bin entrances to remind employees of the dangers.
- If you have to enter a bin, lockout/tag-out the grain handling equipment, and use the appropriate confined space procedures.
- Never enter bins alone, and have an observer monitor you.
- Always dislodge crusted, caked, or frozen grain from the top down.
- Make sure grain is properly dried and stored to prevent spoilage.
- If you are caught in flowing grain, try to get to the outside edges of the bin where the grain is moving slower.
- If someone is trapped, contact emergency response. Do not enter the bin in an attempt to rescue the employee.

Discussion Date: \_\_\_\_\_

Employee Participants:

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